



# Frequently Asked Questions about Ecology's New Algae Control Program

from Ecology's Water Quality Program

## Introduction

Many Washington lakes have problems with excessive growth of algae. Algae can be smelly and unsightly as well as being toxic to humans, pets, and livestock. In 2005, the Washington State Legislature (Legislature) established funding for an algae control program. They tasked the Washington Department of Ecology (Ecology) to develop the program. This focus sheet outlines the problems caused by excessive algal growth and explains the timeline for the algae control program.



Liberty Lake

### **Q: What is an algae bloom?**

**A:** Within a few days, a clear lake can become cloudy with algae. We call this an algae bloom. Algae grow rapidly when sunlight, temperature, and nutrients are adequate. Algal nutrients phosphorus and nitrogen are found in animal and human waste (sewage), in fertilizers, and even in rainwater. Too much phosphorus and nitrogen lead to “nutrient loading.” This may eventually cause algae blooms.

There are many types of algae. Most are harmless, some are considered nuisances, and others are important to lake productivity. Blue-green algae are actually bacteria called cyanobacteria. They can create problems when they form blooms. The blooms happen mostly in the summer or fall, but can occur anytime. Blue-green blooms may float to the surface and can be several inches thick near the shoreline. A blue-green algae bloom often looks like green paint floating on the water and is hard to pick up or hold. A bloom may also look blue, brown, or red.

### **Q: Why is Ecology concerned about blue-green algae?**

**A:** Blue-green blooms pose a human health concern. Although most blue-green blooms are not toxic, some blue-green algae produce nerve or liver toxins. Toxicity is hard to predict. A single species of algae can have toxic and non-toxic strains. A bloom that tests non-toxic one day can turn toxic the next day.

People may become ill after swimming or water skiing in lakes with toxic blue-green algae. Human health effects may include stomach pains, vomiting, diarrhea, skin rashes, and nerve and liver damage. Pets and wildlife have died after exposure to toxic blue-green algae in Washington lakes. Blue-green blooms affect lake recreation creating economic losses.

**Q: What is being proposed?**

**A:** The Legislature asked Ecology to develop an algae control program. Reducing nutrient input to lakes is the only way to prevent algae blooms. However the amount of money available for this program (about \$250,000 per year) is not enough to fund nutrient reduction projects. Ecology believes the program should focus on providing local governments with the tools they need to manage algae problems. The program targets blue-green algae because these algae pose a health risk to humans, pets, and livestock.

Ecology proposes an algae program that provides for:

- Algae identification.
- Toxicity testing.
- An on-line database to post these results.
- Small grants (\$25,000 to \$50,000) for algae or nutrient management projects.



Based on public input, Ecology will delay funding small grants to local governments until fall 2007. In the meantime, Ecology will provide funds to the Washington Department of Health (DOH) to develop statewide guidelines for toxic algae blooms. Developing guidelines helps local governments make decisions about when to post health advisories and when to close waters to recreation. DOH will produce educational signs and outreach materials about algal blooms. Ecology will also provide grants to help develop a centralized algal toxin testing and algal identification laboratory facility.

Lake Steilacoom

**Q: When will this happen?**

**A:** The first phase of the algae program began this summer when Ecology asked for public input. The second phase will begin in fall 2006 when Ecology will provide a grant to DOH and a grant to a laboratory. The small grants program will start a year later in 2007. Ecology will develop guidelines for the grant program in the interim. Eligible grant projects may include:

- Pilot projects for algae control activities.
- Education and outreach.
- Algae control activities.
- Equipment purchase.

**Q: How can you get more information about the algae program?**

**A:** Please contact the following people for more information about the algae program.

**Kathy Hamel**  
**Aquatic Plant Specialist**  
**Washington Department of Ecology**  
**360-407-6562**  
**Email: [kham461@ecy.wa.gov](mailto:kham461@ecy.wa.gov)**

**Joan Clark**  
**Environmental Specialist**  
**Washington Department of Ecology**  
**360-407-6570**  
**Email: [jcla461@ecy.wa.gov](mailto:jcla461@ecy.wa.gov)**

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